#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019421 Address: 333 Burma Road **Date Inspected:** 18-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Oiu Wen. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Component:** OBG components.

**Bridge No:** 

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA Inspector observed and/or found the following:

Bay 14:

This QA Inspector observed the following work in progress:

OBG Seg 13AW:

This QA Inspector observed ZPMC personnel performing fit-up of top bearing plates with bearing stiffener plates (at PP119-1500 and PP119+1500). See attached photo for further information.

OBG Seg 13CW:

This QA Inspector observed that the tack welds of Deck Panel Diaphragm to Deck Panel Floor Beam (at PP123 and 123.5) got cracked while pre-heating was in progress. This was informed to ZPMC QC, identified as Zhang Ling and ABF QA, Kasi Wang. These tack welds were removed, MT was done by ZPMC and refit-up of DP Diaphragm to Floor Beam was done. See attached photos for further information.

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# OBG Seg 14W:

Repair welding of weld joint no: SEG3020Y-022 [Floor Beam (FB) 3327A to Longitudinal Diaphragm (LD) 3051A, Complete Joint Penetration (CJP) weld at Panel Point (PP) 127]. The welder is identified as 051348 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 20152 Rev-0.

Repair welding of weld joint no: SEG3020BB-073 [Bottom Plate (BP) 3090A to Sub Assembly (SA) Plate SA3451A, CJP weld in between PP125 to PP126]. The welder is identified as 067949 and was observed welding in the 2G position. Welding process was identified as Flux Cored Arc Welding (FCAW). ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-FCAW-2G(2F)-ESAB-REPAIR-FCM. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2752 Rev-0.

The SMAW process on weld joint no: SEG3020F-066 (FB3336A to FB3338A, CJP weld at PP128). The welder is identified as 067520 and was observed welding in the 1G position. ZPMC CWI was identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS: B-P-2211-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer